ScienceWorkshop 500 Interface

CI-6400

Features & Specifications  Manuals  Related Products

click for larger image

Key Features:

- Datalogging -- Data Collection and Storage without a Computer
- Ideal for Biology, Chemistry and Introductory Physics
- Record Digital and Analog Simultaneously


Features:

- **Datalogging** -- The ScienceWorkshop 500 Interface collects data directly to a computer, or students can collect data with just the interface and a sensor. Students can set up an experiment using the 500, disconnect from the computer to collect data outside the classroom and then reconnect for data analysis.
- **Portability** -- With a built-in battery compartment for 4 "AA" batteries (not included) the ScienceWorkshop 500 Interface can go just about anywhere and still collect data.
- **50 KB Storage Buffer** -- Stores data runs and experiment setup information.
- **Cross-Platform Data** -- Logged data will open on either a Macintosh or Windows-compatible computer. The interface stores the sensor and data display information so it knows what experiment setup to open.

Unique Characteristics:

- **Ports** -- 2 Digital, 3 Analog
- **Connection** -- Serial (also USB compatible with USB/Serial Converter)
- **Datalogging** -- Collect up to 17,000 Analog (force, voltage, etc.) data points or 7,000 Motion Sensor data points
- **Portable** -- Built-in battery compartment
- **Designed for** -- Starter, Biology, Chemistry, General Science, Earth Science, Physics, Math

**USB/Serial Converter:**

Add PASCO’s USB/Serial Converter (CI-6759) to connect the 500 Interface to the USB port of a computer. Not only is the USB/Serial Converter easy to use, it boosts the performance of the 500 Interface.

**Specifications:**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Speed</td>
<td>19.2 kbaud</td>
</tr>
<tr>
<td>Crystal-controlled timebase</td>
<td>±0.01% accuracy</td>
</tr>
<tr>
<td><strong>Analog Inputs</strong></td>
<td>Three analog channels:</td>
</tr>
<tr>
<td></td>
<td>A: Differential Input -- 2 M Ohms impedance; gain = 1 or 10</td>
</tr>
<tr>
<td></td>
<td>B: Single Ended Input -- 200 k Ohms impedance; gain = 1 or 10</td>
</tr>
<tr>
<td></td>
<td>C: Single Ended Input -- 200 k Ohms impedance; gain = 1</td>
</tr>
<tr>
<td></td>
<td>±10 V range (±0.02 V + 0.1% of reading); 5 mV resolution</td>
</tr>
<tr>
<td></td>
<td>12-bit ADC converts samples</td>
</tr>
<tr>
<td><strong>Digital Inputs</strong></td>
<td>Two digital I/O channels</td>
</tr>
<tr>
<td></td>
<td>5 µs timing resolution</td>
</tr>
<tr>
<td><strong>Datalogging mode without a Computer</strong></td>
<td>Disconnect from your computer and take remote measurements.</td>
</tr>
<tr>
<td></td>
<td>Low power consumption mode prolongs battery life.</td>
</tr>
<tr>
<td></td>
<td>50 KB Storage Buffer: Collect 17,000 Analog (force, voltage, etc.) data points or 7,000 Motion Sensor data points.</td>
</tr>
<tr>
<td></td>
<td>50 KB data storage buffer (2N+1 bytes/sample period, N=# chs, eg: 2 chs @ 10Hz for 1,000 seconds)</td>
</tr>
<tr>
<td></td>
<td>Multiple data runs are appended to buffer.</td>
</tr>
<tr>
<td><strong>Cross-platform Data</strong></td>
<td>Logged data will open on either a Macintosh or Windows-compatible computer. The interface stores the sensor and data display information so it knows what experiment setup to open.</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>9 V@500mA DC supply or a battery pack (4 AA). All inputs and the serial interface have ESD (electrostatic discharge) protection circuitry that works with power on or off.</td>
</tr>
</tbody>
</table>

**Physics 500 Bundles and Experiments:**
- Entry Physics 500 Bundle (CI-6401)
- Intermediate Physics 500 Bundle (CI-6402)
- Standard Physics 500 Bundle (CI-6403)
- Physics Electronic Workbook CD, Vol. 1 (CI-6876)
- Physics Experiment Web CD, Vol. 2 (CI-6877A)

General Science 500 Bundles and Experiments:

- Entry General Science 500 Bundle (CI-6412)
- Intermediate General Science 500 Bundle (CI-6413)
- Standard General Science 500 Bundle (CI-6414)
- General Science Teacher's Guide (CI-7040A) and Student Manual (CI-7041A)

Biology 500 Bundles and Experiments:

- Entry Biology 500 Bundle (CI-6406)
- Intermediate Biology 500 Bundle (CI-6407)
- Standard Biology 500 Bundle (CI-6408)
- Biology Teacher's Guide (CI-7030B) and Student Manual (CI-7031B)

Chemistry 500 Bundles and Experiments:

- Entry Chemistry 500 Bundle (CI-6409)
- Intermediate Chemistry 500 Bundle (CI-6410)
- Standard Chemistry 500 Bundle (CI-6411)
- Chemistry Teacher's Guide (CI-7020A) and Student Manual (CI-7021A)

Earth Science 500 Bundles and Experiments:

- Intermediate Earth Science 500 Bundle (CI-6415)
- Earth Science Teacher's Guide (CI-7060A) and Student Manual (CI-7061A)

Starter 500 Bundles and Experiments:

- Starter Bundle (CI-6404)
- Starter Bundle II (CI-6417)
- Starter Bundle and Starter Bundle II Teacher's Guides (CI-7090A, CI-7093) and Student Manual (CI-7091A)

Math in Science 500 Bundles and Experiments:

- Math in Science Bundle (CI-6416)
- Math in Science Teacher's Guide (CI-7070) and Student Manual (CI-7071)

Related Products:
- DataStudio Lite, PASCO's starter software, comes free with each shipment. We highly recommend upgrading to a full license to get all the power of DataStudio.
- USB/Serial Converter (CI-6759)

For more information or to contact a PASCO representative, send e-mail to Customer Support, or call 800-772-8700 (in US) or 916-786-3800.

http://store.pasco.com/pascostore/showdetl.cfm?&DID=9&Product_ID=1443&Detail=1
Prices and specifications subject to change without notification.

Ordering Information | Legal | Contacts |